

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method performed by an operating system, comprising:
establishing a plurality of non-global operating system partitions within a global operating system environment provided by the operating system, wherein each non-global operating system partition serves to isolate processes running within that non-global operating system partition from other non-global operating system partitions within the global operating system environment, wherein enforcement of boundaries between the non-global operating system partitions is carried out by the operating system, wherein the non-global operating system partitions do not each have a separate operating system kernel executing therein, and wherein the plurality of non-global operating system partitions comprises a particular non-global operating system partition;

associating the particular non-global operating system partition with a first resource pool comprising one or more resources; ~~and~~

ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool;

receiving a request to change the resource pool association for the particular non-global operating system partition to associate the particular non-global operating system partition with a second resource pool instead of the first resource pool, wherein the second resource pool is a different resource pool from the first resource pool, and wherein the second resource pool comprises one or more resources;

without terminating and restarting the processes running within the particular non-global operating system partition;

changing the resource pool association for the particular non-global operating system partition to cause the particular non-global operating system partition to be associated with the second resource pool instead of the first resource pool; and ensuring that the processes running within the particular non-global operating system partition are allowed to utilize only the resources in the second resource pool.

2. (Original) The method of claim 1, wherein the first resource pool comprises one or more processors.

3. (Currently Amended) The method of claim 2, wherein ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool comprises:

assigning work from processes running within the particular non-global operating system partition to only the one or more processors in the first resource pool.

4. (Original) The method of claim 1, wherein the first resource pool comprises an indication of a maximum amount of memory that can be consumed.

5. (Currently Amended) The method of claim 4, wherein ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool comprises:

receiving, from a particular process running within the particular non-global operating system partition, a memory allocation request;

determining whether granting the memory allocation request would cause the maximum amount of memory that can be consumed to be exceeded; and

in response to a determination that granting the memory allocation request would not cause the maximum amount of memory that can be consumed to be exceeded, granting the memory allocation request.

6. (Currently Amended) The method of claim 5, wherein ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool further comprises:

in response to a determination that granting the memory allocation request would cause the maximum amount of memory that can be consumed to be exceeded, deallocating sufficient memory from one or more other processes to enable the memory allocation request to be granted without causing the maximum amount of memory that can be consumed to be exceeded; and granting the memory allocation request.

7. (Original) The method of claim 1, wherein the operating system is executed on a computer system, and wherein the resources in the first resource pool are just a subset of a total set of resources available on the computer system.

8. (Currently Amended) The method of claim 1, wherein ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool comprises:

associating each process running within the particular non-global operating system partition with the first resource pool.

9. Canceled

10. (Currently Amended) The method of claim [[9]] 8, wherein ensuring that the processes running within the particular non-global operating system partition are allowed to utilize only the resources in the second resource pool comprises:

associating each process running within the particular non-global operating system partition with the second resource pool instead of the first resource pool.

11. (Currently Amended) The method of claim 1, wherein the operating system executes on a computer system, and wherein the method further comprises:

prior to receiving the request to change the resource pool association:

receiving, from a particular process running within the particular non-global operating

system partition, a request for information pertaining to all resources; and

providing, to the particular process, information pertaining only to the one or more

resources in the first resource pool, even though the computer system comprises

other resources.

12. (Currently Amended) A machine-readable storage medium having stored thereon at least a portion of an operating system, the machine readable storage medium comprising:

instructions for causing one or more processors to establish a plurality of non-global operating system partitions within a global operating system environment provided by the operating system, wherein each non-global operating system partition serves to isolate processes running within that non-global operating system partition from other non-global operating system

partitions within the global operating system environment, wherein enforcement of boundaries between the non-global operating system partitions is carried out by the operating system, wherein the non-global operating system partitions do not each have a separate operating system kernel executing therein, and wherein the plurality of non-global operating system partitions comprises a particular non-global operating system partition;

instructions for causing one or more processors to associate the particular non-global operating system partition with a first resource pool comprising one or more resources; ~~and~~

instructions for causing one or more processors to ensure that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool;

instructions for causing one or more processors to receive a request to change the resource pool association for the particular non-global operating system partition to associate the particular non-global operating system partition with a second resource pool instead of the first resource pool, wherein the second resource pool is a different resource pool from the first resource pool, and wherein the second resource pool comprises one or more resources;

instructions for causing one or more processors to change, without terminating and restarting the processes running within the particular non-global operating system partition, the resource pool association for the particular non-global operating system partition to cause the particular non-global operating system partition to be associated with the second resource pool instead of the first resource pool; and

instructions for causing one or more processors to ensure, without terminating and restarting the processes running within the particular non-global operating system partition, that the processes running within the particular non-global operating system partition are allowed to utilize only the resources in the second resource pool.

13. (Previously Presented) The machine-readable storage medium of claim 12, wherein the first resource pool comprises one or more processors.

14. (Currently Amended) The machine-readable storage medium of claim 13, wherein the instructions for causing one or more processors to ensure that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool comprises:

instructions for causing one or more processors to assign work from processes running within the particular non-global operating system partition to only the one or more processors in the first resource pool.

15. (Previously Presented) The machine-readable storage medium of claim 12, wherein the first resource pool comprises an indication of a maximum amount of memory that can be consumed.

16. (Currently Amended) The machine-readable storage medium of claim 15, wherein the instructions for causing one or more processors to ensure that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool comprises:

instructions for causing one or more processors to receive, from a particular process running within the particular non-global operating system partition, a memory allocation request;

instructions for causing one or more processors to determine whether granting the memory allocation request would cause the maximum amount of memory that can be consumed to be exceeded; and

instructions for causing one or more processors to grant, in response to a determination that granting the memory allocation request would not cause the maximum amount of memory that can be consumed to be exceeded, the memory allocation request.

17. (Currently Amended) The machine-readable storage medium of claim 16, wherein the instructions for causing one or more processors to ensure that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool further comprises:

instructions for causing one or more processors to deallocate, in response to a determination that granting the memory allocation request would cause the maximum amount of memory that can be consumed to be exceeded, sufficient memory from one or more other processes to enable the memory allocation request to be granted without causing the maximum amount of memory that can be consumed to be exceeded; and

instructions for causing one or more processors to grant the memory allocation request.

18. (Previously Presented) The machine-readable storage medium of claim 12, wherein the operating system is executed on a computer system, and wherein the resources in the first resource pool are just a subset of a total set of resources available on the computer system.

19. (Currently Amended) The machine-readable storage medium of claim 12, wherein the instructions for causing one or more processors to ensure that processes running within the

particular non-global operating system partition are allowed to utilize only the resources in the first resource pool comprises:

instructions for causing one or more processors to associate each process running within the particular non-global operating system partition with the first resource pool.

20. Canceled

21. (Currently Amended) The machine-readable storage medium of claim ~~20~~ 19, wherein the instructions for causing one or more processors to ensure that the processes running within the particular non-global operating system partition are allowed to utilize only the resources in the second resource pool comprises:

instructions for causing one or more processors to associate each process running within the particular non-global operating system partition with the second resource pool instead of the first resource pool.

22. (Currently Amended) The machine-readable storage medium of claim 12, wherein the operating system executes on a computer system, and wherein the machine-readable storage medium further comprises:

instructions for causing one or more processors to receive, prior to receiving the request to change the resource pool association, from a particular process running within the particular non-global operating system partition, a request for information pertaining to all resources; and

instructions for causing one or more processors to provide, to the particular process, information pertaining only to the one or more resources in the first resource pool, even though the computer system comprises other resources.

23. (Currently Amended) An apparatus for implementing at least a portion of an operating system, comprising:

means for establishing a plurality of non-global operating system partitions within a global operating system environment provided by the operating system, wherein each non-global operating system partition serves to isolate processes running within that non-global operating system partition from other non-global operating system partitions within the global operating system environment, wherein enforcement of boundaries between the non-global operating system partitions is carried out by the operating system, wherein the non-global operating system partitions do not each have a separate operating system kernel executing therein, and wherein the plurality of non-global operating system partitions comprises a particular non-global operating system partition;

means for associating the particular non-global operating system partition with a first resource pool comprising one or more resources; ~~and~~

means for ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool;

means for receiving a request to change the resource pool association for the particular non-global operating system partition to associate the particular non-global operating system partition with a second resource pool instead of the first resource pool, wherein the second resource pool is a different resource pool from the first resource pool, and wherein the second resource pool comprises one or more resources;

means for changing, without terminating and restarting the processes running within the particular non-global operating system partition, the resource pool association for the particular

non-global operating system partition to cause the particular non-global operating system partition to be associated with the second resource pool instead of the first resource pool; and means for ensuring, without terminating and restarting the processes running within the particular non-global operating system partition, that the processes running within the particular non-global operating system partition are allowed to utilize only the resources in the second resource pool.

24. (Original) The apparatus of claim 23, wherein the first resource pool comprises one or more processors.

25. (Currently Amended) The apparatus of claim 24, wherein the means for ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool comprises:

means for assigning work from processes running within the particular non-global operating system partition to only the one or more processors in the first resource pool.

26. (Original) The apparatus of claim 23, wherein the first resource pool comprises an indication of a maximum amount of memory that can be consumed.

27. (Currently Amended) The apparatus of claim 26, wherein the means for ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool comprises:

means for receiving, from a particular process running within the particular non-global operating system partition, a memory allocation request;

means for determining whether granting the memory allocation request would cause the maximum amount of memory that can be consumed to be exceeded; and

means for granting, in response to a determination that granting the memory allocation request would not cause the maximum amount of memory that can be consumed to be exceeded, the memory allocation request.

28. (Currently Amended) The apparatus of claim 27, wherein the means for ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool further comprises:

means for deallocating, in response to a determination that granting the memory allocation request would cause the maximum amount of memory that can be consumed to be exceeded, sufficient memory from one or more other processes to enable the memory allocation request to be granted without causing the maximum amount of memory that can be consumed to be exceeded; and

means for granting the memory allocation request.

29. (Original) The apparatus of claim 23, wherein the operating system is executed on a computer system, and wherein the resources in the first resource pool are just a subset of a total set of resources available on the computer system.

30. (Currently Amended) The apparatus of claim 23, wherein the means for ensuring that processes running within the particular non-global operating system partition are allowed to utilize only the resources in the first resource pool comprises:

means for associating each process running within the particular non-global operating system partition with the first resource pool.

31. Canceled

32. (Currently Amended) The apparatus of claim ~~31~~ 30, wherein the means for ensuring that the processes running within the particular non-global operating system partition are allowed to utilize only the resources in the second resource pool comprises:

means for associating each process running within the particular non-global operating system partition with the second resource pool instead of the first resource pool.

33. (Currently Amended) The apparatus of claim 23, wherein the operating system executes on a computer system, and wherein the apparatus further comprises:

means for receiving, prior to receiving the request to change the resource pool association, from a particular process running within the particular non-global operating system partition, a request for information pertaining to all resources; and

means for providing, to the particular process, information pertaining only to the one or more resources in the first resource pool, even though the computer system comprises other resources.